FIG. 1

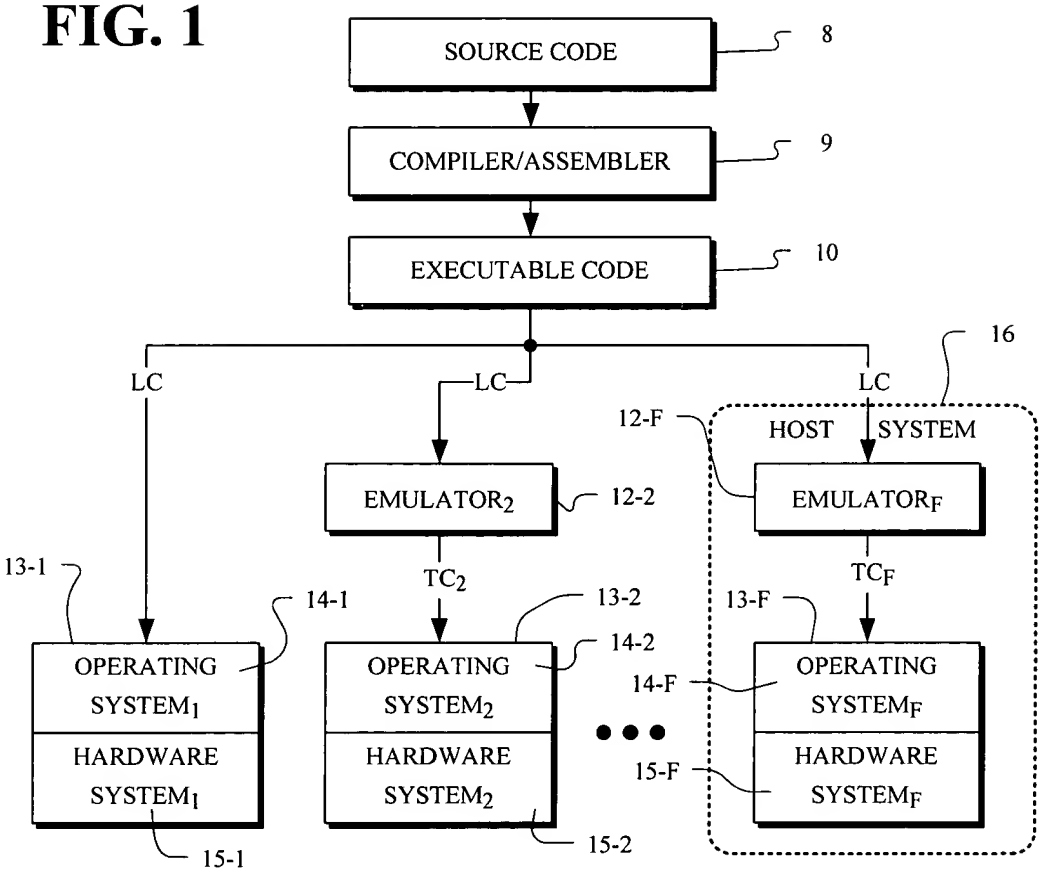
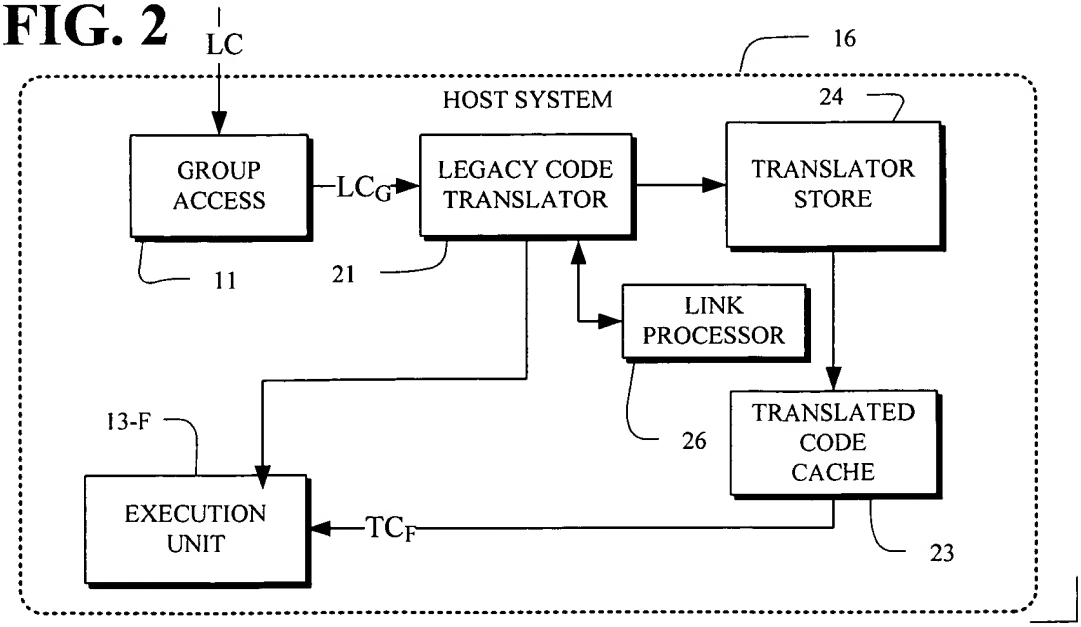


FIG. 2



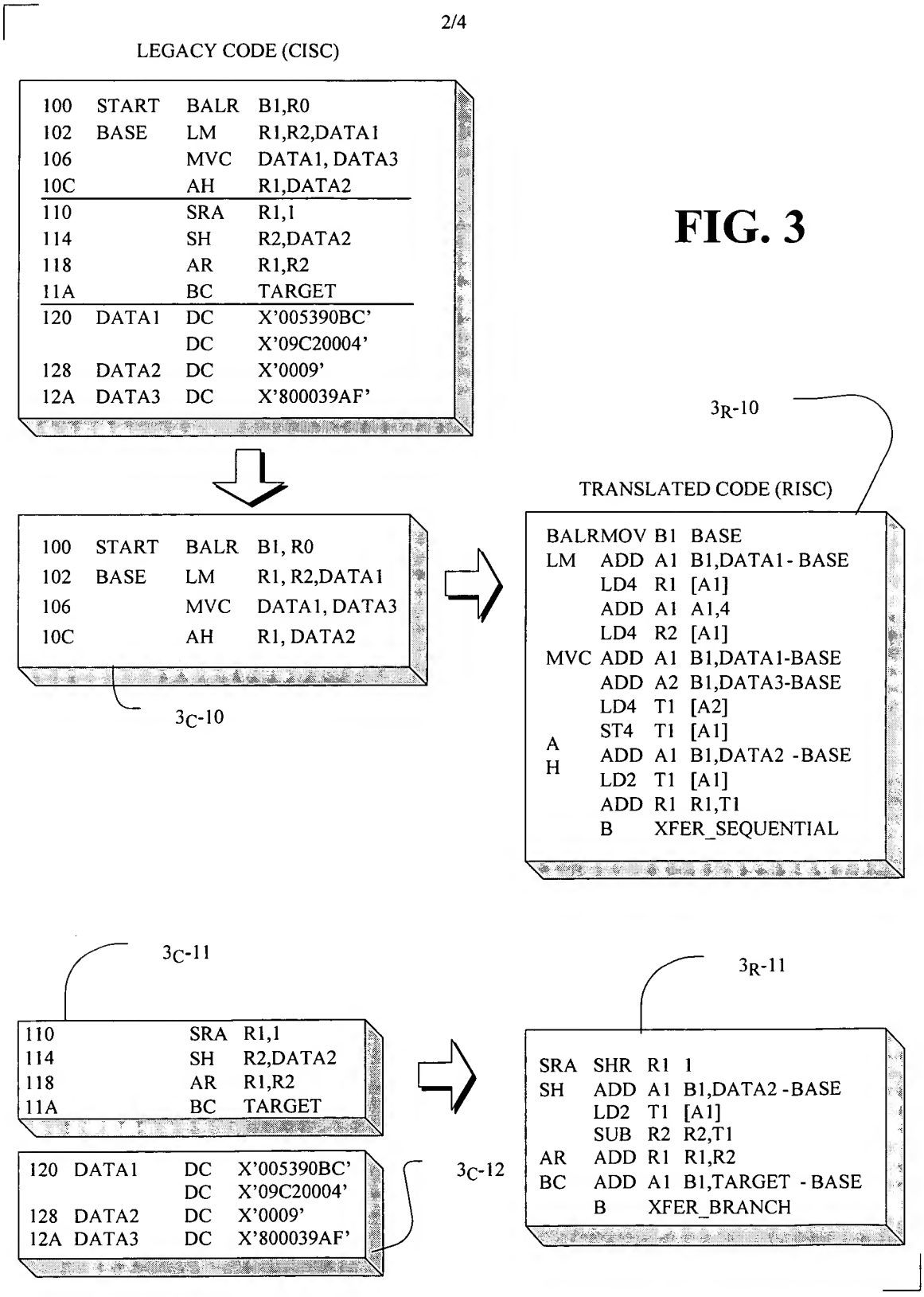

LEGACY CODE (CISC)
100 START BALR B1,R0
102 BASE LM R1,R2,DATA1
106 MVC DATA1, DATA3
10C AH R1,DATA2
110 SRA R1,1
114 SH R2,DATA2
118 AR R1,R2
11A BC TARGET
120 DATA1 DC X'005390BC'
DC X'09C20004'
128 DATA2 DC X'0009'
12A DATA3 DC X'800039AF'
100 START BALR B1, R0
102 BASE LM R1, R2,DATA1
106 MVC DATA1, DATA3
10C AH R1, DATA2
3C-10
3R-10
TRANSLATED CODE (RISC)
BALRMOV B1 BASE
LM ADD A1 B1,DATA1- BASE
LD4 R1 [A1]
ADD A1 A1,4
LD4 R2 [A1]
MVC ADD A1 B1,DATA1-BASE
ADD A2 B1,DATA3-BASE
LD4 T1 [A2]
ST4 T1 [A1]
A
H
ADD A1 B1,DATA2 -BASE
LD2 T1 [A1]
ADD R1 R1,T1
B XFER_SEQUENTIAL
3C-11
110 SRA R1,1
114 SH R2,DATA2
118 AR R1,R2
11A BC TARGET
120 DATA1 DC X'005390BC'
DC X'09C20004'
128 DATA2 DC X'0009'
12A DATA3 DC X'800039AF'
3C-12
3R-11
SRA SHR R1 1
SH ADD A1 B1,DATA2 -BASE
LD2 T1 [A1]
SUB R2 R2,T1
AR ADD R1 R1,R2
BC ADD A1 B1,TARGET - BASE
B XFER_BRANCH

FIG. 3

FIG. 4

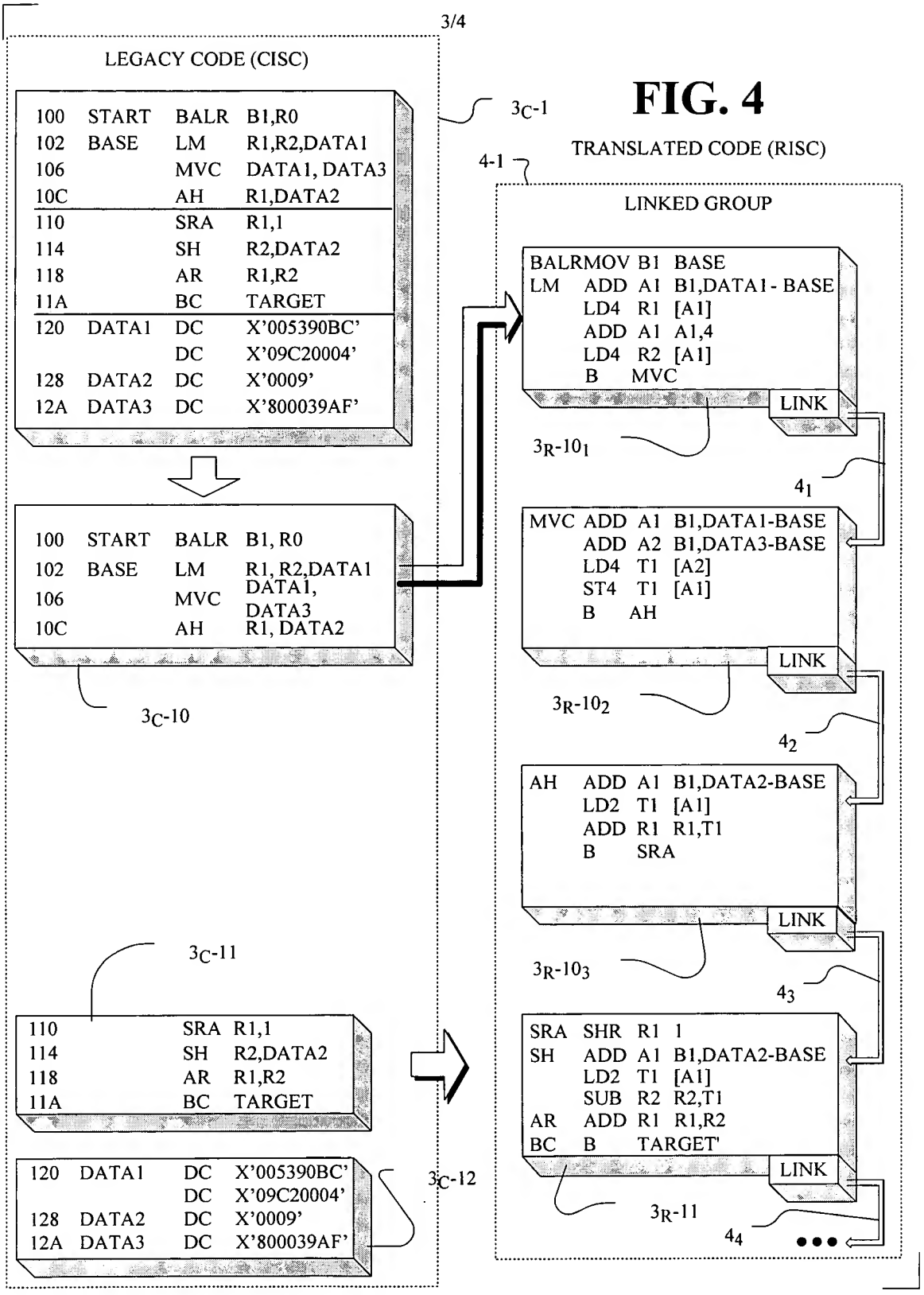
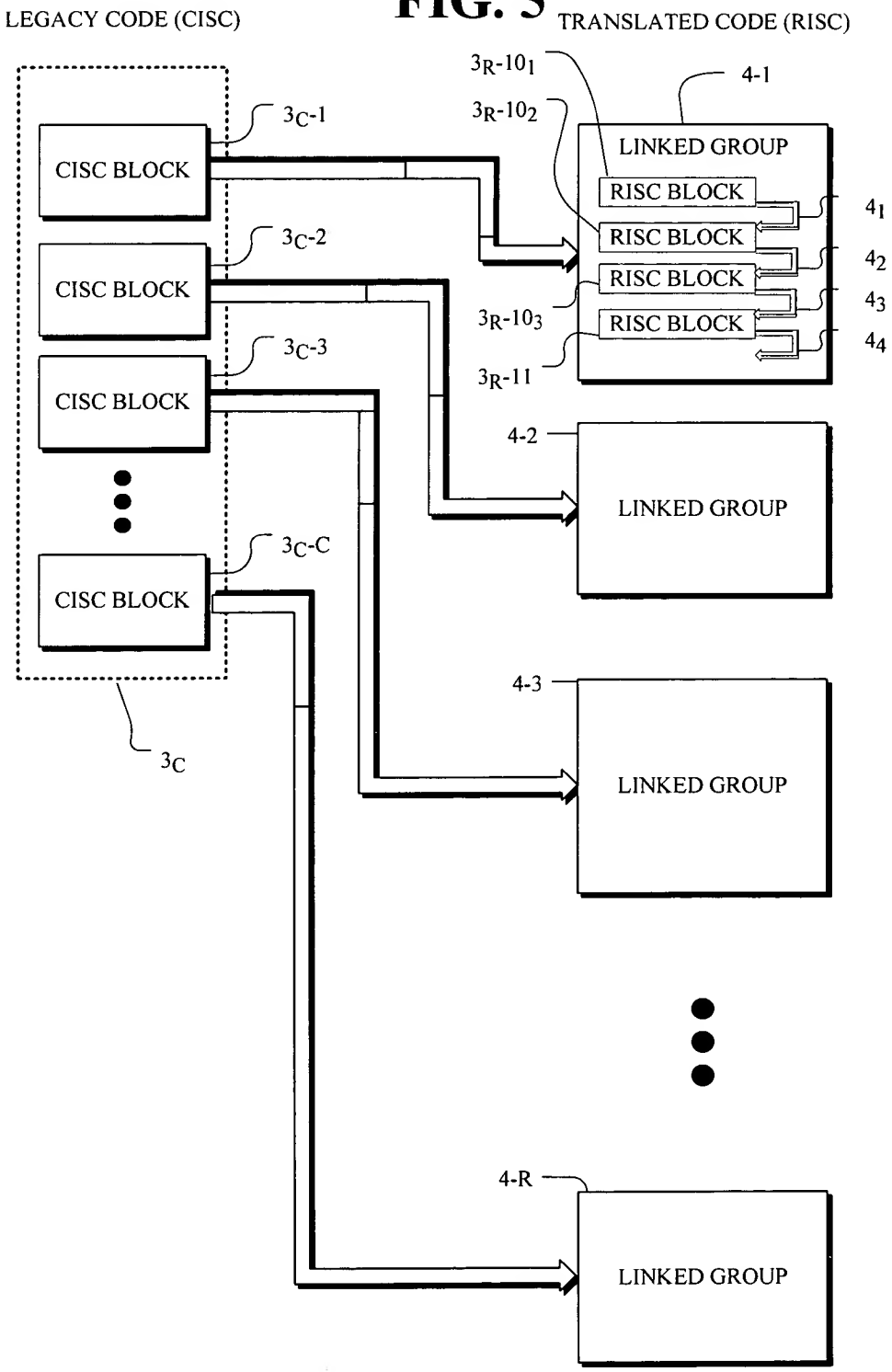

LEGACY CODE (CISC)
100 START BALR B1,R0
102 BASE LM R1,R2,DATA1
106 MVC DATA1, DATA3
10C AH R1,DATA2
110 SRA R1,1
114 SH R2,DATA2
118 AR R1,R2
11A BC TARGET
120 DATA1 DC X'005390BC'
DC X'09C20004'
128 DATA2 DC X'0009'
12A DATA3 DC X'800039AF'
3C-1
100 START BALR B1, R0
102 BASE LM R1, R2,DATA1
106 MVC DATA1, DATA3
10C AH R1, DATA2
3C-10
110 SRA R1,1
114 SH R2,DATA2
118 AR R1,R2
11A BC TARGET
120 DATA1 DC X'005390BC'
DC X'09C20004'
128 DATA2 DC X'0009'
12A DATA3 DC X'800039AF'
3C-11
3C-12
TRANSLATED CODE (RISC)
4-1
LINKED GROUP
BALRMOV B1 BASE
LM ADD A1 B1,DATA1 - BASE
LD4 R1 [A1]
ADD A1 A1,4
LD4 R2 [A1]
B MVC
LINK
3R-101
41
MVC ADD A1 B1,DATA1-BASE
ADD A2 B1,DATA3-BASE
LD4 T1 [A2]
ST4 T1 [A1]
B AH
LINK
3R-102
42
AH ADD A1 B1,DATA2-BASE
LD2 T1 [A1]
ADD R1 R1,T1
B SRA
LINK
3R-103
43
SRA SHR R1 1
SH ADD A1 B1,DATA2-BASE
LD2 T1 [A1]
SUB R2 R2,T1
AR ADD R1 R1,R2
BC B TARGET'
LINK
3R-11
44

FIG. 5


LEGACY CODE (CISC)
TRANSLATED CODE (RISC)
CISC BLOCK
CISC BLOCK
CISC BLOCK
CISC BLOCK
3C-1
3C-2
3C-3
3C-C
3C
3R-101
3R-102
3R-103
3R-11
4-1
LINKED GROUP
RISC BLOCK
RISC BLOCK
RISC BLOCK
RISC BLOCK
41
42
43
44
4-2
LINKED GROUP
4-3
LINKED GROUP
4-R
LINKED GROUP